INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/24612

C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of South (BANGS) 10 August 1993 (10.08.1993), see entire document. Y Documentation are listed in the continuation of Box C. Y Further documents are listed in the continuation of Box C. Y Special categories of cled documents. **A** **Contents of belieflands are listed in the continuation of line are supported to the special grazon of certain the continuation of process of certain the special categories of cled documents. **A** **Gournest effective technique techn		10304/24012		
According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 606(191-198, 604(99.01-100.03, 101.01-101.03) Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Classion of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5.234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 ** ** ** ** ** ** ** ** **	A. CLASSIFICATION OF SUBJECT MATTER			
Recording to International Patent Classification (IPC) or to both national classification and IPC	1			
Minimum documentation searched (classification system followed by classification symbols) U.S.: 636/191-198; 604/99.01-100.03, 101.01-101.05 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,454 A (BANGS) 10 August 1993 (10.08, 1993), see entire document. 1, 6, 8-16 7 **A* document atefining the general state of the art which is not considered to be opticipated in the politicular relevance **B* center production or paster published on or after the international filling date to the new thick may show doubts on priority chainty or which is cloud to enablish the political to the international provided on the provision of the international search to considered down consense is after allow appetition. **P* documents problished prior to the international search to priority that claimed be priority that claimed be priority that claimed be provided and the continuation of the problemation does of another cluston or other special reason to appetite the provision of the international search to considered down or accomment of particular relevance to exclusive the problemation does of another cluston or other special reason to appetite the provision of the international search to considered down or accomment to excented with an error endormed particular relevance to considered to which are relevance to exclusive the consument of particular relevance to exclusive the problemation does of another cluston or other special reason to applications or paster published on the construction of particular relevance to exclusive the consument of particular relevance to exclusive the consument of particular relevance to exclusive the consument of particular relevan				
Minimum documentation searched (classification system followed by classification symbols) U.S.: 606/191-198; 604/99.01-100.03,101.01-101.05 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages X US 5,234.454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 ** Special categories of clied documents: "A" document defining the gazeni state of the art which is not considered to be of patients relevance. "E cartier application or passat published on or shere the international filling date are subticible the publication date of another cliedso or other special reason (a specified) "C" document referring to an oral disclosure, use, nabibilition or other means the publication date of another cliedso or other special reason (a specified) The document referring to an oral disclosure, use, nabibilition or other means the publication date of another clied on other manufacture of the comment of particular relevance is an inventive special reason (a specified) The document referring to an oral disclosure, use, nabibilition or other means the considered to involve an inventive special reason (a specified) The document referring to an oral disclosure, use, nabibilition or other means being obvious to a parson skilled in the art occument or particular relevance; the claimed invention cannot be considered to involve an inventive special reason (a specified) The document referring to an oral disclosure, use, nabibilition or other means the considered to vivole or special reason (a specified) The document referring to an oral disclosure, use, nabibilition or other means the considered to vivole or special reason (a specified) The document referring to an oral disclo		national classification and IPC		
U.S.: 606/191-198; 604/99.01-100.03,101.01-101.05 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. ** Spetal casegories of cited documents *A* document defining the general state of the art which is not considered to be of particular relevance. ** Cartier application or paster published on or after the international filling date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance in cashibilities to policy claim(s) or which is clast to establish the politication date of another cluston or other special reason (a specified) **Comment of particular relevances: the claimed invention cannot be considered now vice cannot be considered to vine or other means to be considered to vine or one other and occument a principle and invention cannot be considered now vice cannot be considered to vine or one other and occument and being obvious to a person skilled in the art occument means of the invention of the international flung date but their than the principle or theory understand consumer to particular relevances: the claimed invention cannot be considered to vine one other and occument, such combination being obvious to a person skilled in the art occurred particular relevance. The columns of particular relevance in considered to vine one other and occument, such combination being obvious to a person skilled in the art occurred particular relevance. The calculation of the international Search Proport *** document of particular relevances: the claimed towards cannot be considered to vine one o	B. FIELDS SEARCHED			
U.S.: 606/191-198; 604/99.01-100.03,101.01-101.05 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. ** Spetal casegories of cited documents *A* document defining the general state of the art which is not considered to be of particular relevance. ** Cartier application or paster published on or after the international filling date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance in cashibilities to policy claim(s) or which is clast to establish the politication date of another cluston or other special reason (a specified) **Comment of particular relevances: the claimed invention cannot be considered now vice cannot be considered to vine or other means to be considered to vine or one other and occument a principle and invention cannot be considered now vice cannot be considered to vine or one other and occument and being obvious to a person skilled in the art occument means of the invention of the international flung date but their than the principle or theory understand consumer to particular relevances: the claimed invention cannot be considered to vine one other and occument, such combination being obvious to a person skilled in the art occurred particular relevance. The columns of particular relevance in considered to vine one other and occument, such combination being obvious to a person skilled in the art occurred particular relevance. The calculation of the international Search Proport *** document of particular relevances: the claimed towards cannot be considered to vine one o	Minimum documentation searched (classification custom followed by classification grapholo)			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X		by causimoution symbols)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X. US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 See patent family annex. ** Special categories of clad documents: ** A document defining the general state of the art which is not considered to be of particular trelvance in a consecution of the subtlet of the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the claimed investion cannot be considered to involve an investion cannot be considered on the claimed investion cannot be considered to involve an investion cannot be considered to be of the cannot be considered to involve an investion cannot be considered to be claimed investion cannot be considered to be claimed. **A** docum	0.0			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X. US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 See patent family annex. ** Special categories of clad documents: ** A document defining the general state of the art which is not considered to be of particular trelvance in a consecution of the subtlet of the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the claimed investion cannot be considered to involve an investion cannot be considered on the claimed investion cannot be considered to involve an investion cannot be considered to be of the cannot be considered to involve an investion cannot be considered to be claimed investion cannot be considered to be claimed. **A** docum				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X. US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 See patent family annex. ** Special categories of clad documents: ** A document defining the general state of the art which is not considered to be of particular trelvance in a consecution of the subtlet of the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classific or described in the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the claimed investion cannot be considered on the publication date of another classification or other means **Commissioner for Particular relevance; the claimed investion cannot be considered on the claimed investion cannot be considered to involve an investion cannot be considered on the claimed investion cannot be considered to involve an investion cannot be considered to be of the cannot be considered to involve an investion cannot be considered to be claimed investion cannot be considered to be claimed. **A** docum	Documentation searched other than minimum documentation to th	e extent that such documents are included in	the fields searched	
C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 Further documents are listed in the continuation of Box C. * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of the c				
C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 Further documents are listed in the continuation of Box C. * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of the c				
C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 Further documents are listed in the continuation of Box C. * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of the c				
C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 Further documents are listed in the continuation of Box C. * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of cited documents: * Category * Special categories of the c	Electronic data base consulted during the international search (name	ne of data base and, where practicable, sear	ch terms used)	
Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,434 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 See patent family annex. * Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance. "E" carlier application or patent published on or after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory undered movel or considered to respectify the invention cannot be considered to respectify the principle or theory undered movel or considered to involve an investive step when the document states alone "X" document which may throw doubs on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified). "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filling date but later than the priority date claimed or priority date claimed or priority date claimed or priority than the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document referring to an oral disclosure, use, exhibition or other means Date of the actual completion of the international search "Date of mailing of the international search priority date claimed invention cannot be considered to a priority and priority and priority date claimed invention cannot be considered only or priority and prior		, <u>F</u>	1011110 110019	
Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,434 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 See patent family annex. * Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance. "E" carlier application or patent published on or after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory undered movel or considered to respectify the invention cannot be considered to respectify the principle or theory undered movel or considered to involve an investive step when the document states alone "X" document which may throw doubs on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified). "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filling date but later than the priority date claimed or priority date claimed or priority date claimed or priority than the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document referring to an oral disclosure, use, exhibition or other means Date of the actual completion of the international search "Date of mailing of the international search priority date claimed invention cannot be considered to a priority and priority and priority date claimed invention cannot be considered only or priority and prior				
Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5,234,434 A (BANGS) 10 August 1993 (10.08.1993), see entire document. 1, 6, 8-16 7 See patent family annex. * Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance. "E" carlier application or patent published on or after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory undered movel or considered to respectify the invention cannot be considered to respectify the principle or theory undered movel or considered to involve an investive step when the document states alone "X" document which may throw doubs on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified). "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filling date but later than the priority date claimed or priority date claimed or priority date claimed or priority than the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document referring to an oral disclosure, use, exhibition or other means Date of the actual completion of the international search "Date of mailing of the international search priority date claimed invention cannot be considered to a priority and priority and priority date claimed invention cannot be considered only or priority and prior	a poorn militaria			
Further documents are listed in the continuation of Box C. * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of parkitular relevance. "B" earlier application or patent published on or after the international filing date or priority date claimed in may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as epscified) "O" document referring to an oral disclosure, use, exhibition or other means of the actual completion of the international filing date but later than the priority date claimed "P" document published after the international filing date but have document or particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is cannot be considered to involve an inventive step when the document is combined with one or many the priority date claimed "Y" document published after the international filing date but the international filing date or priority date claimed invention cannot be considered to involve an inventive step when the document is combined with one or many the priority date claimed "Y" document published after the international afting date or priority date claimed invention cannot be considered to involve an inventive step when the document is combined with one or many the priority date claimed invention cannot be considered to involve an inventive step when the document is combined with one or many the priority date claimed "Y" document referring to an oral disclosure, use, exhibition or other means the priority date claimed "Y" document published after the international afting date or priority date claimed invention cannot be considered to involve an inventive step when the document is combined on the organization and the priority date claimed invention cannot be considered to involve an inventive step when the document is combined on the priority date claimed invention cannot be conside				
Further documents are listed in the continuation of Box C. * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance. "B" earlier application or patent published on or after the international filing date of considered in the publication date of another citation or other special reason (as specified) "C" document referring to an oral disclosure, use, exhibition or other means "P" document referring to an oral disclosure, use, exhibition or other means "P" document referring to an oral disclosure, use, exhibition or other means "P" document spublished prior to the international filing date but later than the priority date claimed "Date of the actual completion of the international search "O' December 2004 (07.12.2004) Name and mailing address of the ISA/US Commissioner for Patents P.O. Box 1450 Altxandria, Virginia 22313-1450 See patent family annex. "T" later document published after the international filing date or priority date and not nocultie with the upplication but cited to understand the principle or theory underlying the invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document inventive step			Relevant to claim No.	
Further documents are listed in the continuation of Box C. * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance: "B" earlier application or patent published on or after the international filing date or priority descentible the publication date of another citation or other special reason (as especified) "C" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document guildaded prior to the international filing date but later than the priority date slaimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Commissioner for Patents P.O. Box 1450 Altorrized Officer Catherine S. Williams Telephone No. 571-272-4970	X US 5,234,454 A (BANGS) 10 August 1993 (10.08.	X US 5,234,454 A (BANGS) 10 August 1993 (10.08.1993), see entire document.		
Further documents are listed in the continuation of Box C. * Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance B* See patent family annex. It is document defining the general state of the art which is not considered to be of particular relevance B* carlier application or patent published on or after the international filing date or priority claim(s) or which is cited to establish the publication date of another cliation or other special reason (as specified) Coument published prior to the international filing date but later than the priority date claimed P* document upflished prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm. ISA/US Commissioner for Patents P.O. Box 1450 Altoxandria, Virginia 22313-1450 See patent family annex. *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered to involve an inventive step when the document is combined with not or other step when the document is combined with not or other undercoments, such combination being obvious to a person skilled in the art document incompleted to involve an inventive step when the document is combined with not or other undercoments, such combination being obvious to a person skilled in the art document incompleted to involve an inventive step when the document is combined with not or other undercoments, such combination being obvious to a person skilled in the art document incompleted to involve an inventive step when the document is combined with not or other undercoments, such combination being obvious to a person skilled in the art document incompleted to involve an inventive step when the document is combi				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970	Y		7	
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970				
** Special categories of cited documents: *A" document defining the general state of the art which is not considered to be of particular relevance *B" earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier application or patent published on or after the international filing date earlier and not in conflict with the application but cited to understand the principle or theory underlying the invention *X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone *Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970	Further documents are listed in the continuation of Boy C	Con notant family armor	_	
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 "X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family "A" document member of the same patent family Date of mailing of the international search report Authorized officer Catherine S. Williams Telephone No. 571-272-4970				
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Available of the actual completion of the actual considered to involve an inventive step when the document is considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family The B 2005 Authorized officer Catherine S. Williams Telephone No. 571-272-4970	Special categories of cited documents:			
"E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Alexandria, Virginia 22313-1450 Alexandria, Virginia 22313-1450 Alexandria, Virginia 22313-1450 Mocument international filing date but later than the international filing date but later than the priority date claimed "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be con	"A" document defining the general state of the art which is not considered to be	principle or theory underlying the inver	ntion	
"E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Action of the international filing date but later than the priority date claimed Considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document member of the same patent family The B 2005 Authorized officer Catherine S. Williams Telephone No. 571-272-4970	of particular relevance			
when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 When the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Authorized of ficer Catherine S. Williams Telephone No. 571-272-4970	"E" earlier application or patent published on or after the international filing date		laimed invention cannot be	
establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Mail Stop PCT, Atm: Start Sta			ed to involve an inventive step	
specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family The B 2005 Authorized officer Catherine S. Williams Telephone No. 571-272-4970				
"O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Take a document member of the same patent family Authorized of mailing of the international search report Catherine S. Williams Telephone No. 571-272-4970			laimed invention cannot be	
"P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Mocument referring to an oral disclosure, use, exhibition or other means being obvious to a person skilled in the art document member of the same patent family Date of mailing of the international search report Authorized officer Catherine S. Williams Telephone No. 571-272-4970	•	combined with one or more other such	documents, such combination	
Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Date of mailing of the international search report Authorized officer Catherine S. Williams Telephone No. 571-272-4970	"O" document referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the	art	
Date of the actual completion of the international search O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Date of mailing of the international search report Authorized officer Catherine S. Williams Telephone No. 571-272-4970	"P" document published prior to the international filing date but later than the	"&" document member of the same patent for	amily	
O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Authorized officer Catherine S. Williams Telephone No. 571-272-4970				
O7 December 2004 (07.12.2004) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Authorized officer Catherine S. Williams Telephone No. 571-272-4970	Date of the actual completion of the international search Date of mailing of the international search report			
Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970	•	a d F	ักวักกร	
Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970	07 December 2004 (07.12.2004) 11 F L B ZUUJ			
Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970	<u> </u>	Authorized officer	7	
Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970		Catherine S Williams Y. Hurle	4 Km	
Alexandria, Virginia 22313-1450 Telephone No. 571-272-4970		Catherine G. Williams		
, •	Alexandria, Virginia 22313-1450		/	
		}		